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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,748	04/11/2002	Shlomo Ben-Haim	501049.20533 (20066.21)	7537

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EXAMINER

HOLMES, REX R

ART UNIT PAPER NUMBER

3762

DATE MAILED: 08/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/980,748		BEN-HAIM ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Rex Holmes		3762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2002.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-85 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-85 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>04/11/2002</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because the abstract is not in narrative form and not on a separate sheet. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 6, 8, 19-20, 22, 32-33, 35, 49-50, 52, 62-63, 65, 74-75 and 77 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Regarding Claims 6, 8, 19-20, 22, 32-33, 35, 49-50, 52, 62-63, 65, 74-75 and 77, each recites "... and comprising ...", this expands the previous claim instead of further limiting it. It is suggested that the applicant use "further comprising."

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-8, 11-22, 25-35, 38-53, 56-66, 69-78 and 81-85 are rejected under 35 U.S.C. 102(b) as being anticipated by KenKnight (U.S. Pat. 5,797,967).

8. Regarding Claims 1-8, 11-22, 25-35, 38-53, 56-66, 69-78 and 81-85, KenKnight discloses a method and apparatus of defibrillating a heart at a rate of 10Hz for at least 100ms (~300ms) while supplying energy that is less than 1 joule having an amplitude less than 50mA (Column 2, Lines 58-67; Column 3, Lines 3-8; Column 10, Lines 61-66). KenKnight further discloses that the method and apparatus comprises a step for or a controller for sensing the activity in the heart and then respond to it by pulsing in bursts (Column 1, Lines 42-45; Column 11, Lines 60-66). KenKnight also discloses the use of fencing signals to inhibit and control activation fronts (Column 11, Lines 12-34).

KenKnight discloses further discloses that the pulses are applied with different parameters to a variety of sites interspersed within the heart (Column 8, Lines 65-67; Figure 8, 14a, 14b, 13). It is also disclosed that the controller is programmed to determine the activation interval after the first shock and then continued application of

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pulses is computed and applied. It is further disclosed that after each defibrillation pulse the application of the first defibrillation-level shock, a new and longer cycle length is used to control the critical tissue volume. KenKnight also discloses that the pulses occur near the peak of ventricular depolarization, thus causing depolarization (Column 1, Lines 25-27). It is further stated that the selected cardiac tissue may be ventricular or atrial tissue (Column 4, Lines 4-9).

It is noted that local control of the heart along with activation front control described in Column 11, Lines 12-34 describes fencing signals without explicitly calling them fencing signals. It is further noted that atrial depolarization cued to the start of ventricular depolarization causes depolarization of substantially all excitable contractile tissue of the heart.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 9-10, 23-24, 36-37, 54-55, 67-68 and 79-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over KenKnight as applied to claims 1-8, 11-22, 25-35, 38-53, 56-66, 69-78 and 81-85 above, and further in view of Pless et al (U.S. Pat. 5,489,293).

11. KenKnight discloses the defibrillator substantially as claimed, but does not specifically disclose that the pulses are less than 100W. Pless discloses a staged

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energy storage system for an implantable device capable of delivering a 5 Watt, 1 Joule pulse every 100ms (Column 6, lines 31-43).

12. Regarding claims 9-10, 23-24, 36-37, 54-55, 67-68 and 79-80, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the defibrillator of KenKnight with the pulses less than 100W as taught by Pless to have provided defibrillation pulses with a low voltage power source, in order to maximize the life of the implantable devices battery.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rex Holmes whose telephone number is 571-272-8827. The examiner can normally be reached on M-F 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on 571-272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Rex Holmes



George Evanisko

Primary Examiner

8/26/6